Name _____ Date _____ Period _____

Dalton's Law of Partial Pressures

*Solve the following problems. Show **ALL** work including equations and units. Round all answers to the correct number of significant figures.*

1. A mixture of oxygen, hydrogen and nitrogen gases exerts a total pressure of 278 kPa. If the partial pressures of the oxygen and the hydrogen are 112 kPa and 101 kPa respectively, what would be the partial pressure exerted by the nitrogen?

#1 Answer:

2. A mixture of neon and argon gases exerts a total pressure of 2.39 atm. The partial pressure of the neon alone is 1.84 atm, what is the partial pressure of the argon gas in kPa?

#2 Answer:

3. A 5.0 liter container at 20.0°C has 4 gases pumped in. The total pressure of the gases is 4.80 atm. If the pressure of the first gas is 1.20 atm, and the pressure of the second gas is 0.490 atm, the pressure of the third gas is 0.780 atm, what is the pressure of the fourth gas in atmospheres?

#3 Answer:

4. Argon, neon, and krypton were in a container with a total pressure of 5.6atm. If the partial pressure of argon and neon are each 2.1 atm, what is the partial pressure of the krypton?

#4 Answer:

5. A one liter flask contains two gases at a total pressure of 3.0 atm, if the partial pressure of one of the gases is 0.5 atm, what is the partial pressure of the other gas?

#5 Answer:

6. Find the total pressure (in atm) of a mixture that contains 3 gases with the following partial pressures. Gas A is 4.2 atm, Gas B is 780 mmHg, Gas C is 250.00kPa

#6 Answer:

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